UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/050,579	01/15/2002	Gregory D. Linden	ALEXAI.008A	9064

20995	7590	06/04/2004	**EXAMINER**	
			LU, KUEN S	

KNOBBE MARTENS OLSON & BEAR LLP
2040 MAIN STREET
FOURTEENTH FLOOR
IRVINE, CA 92614

ART UNIT	PAPER NUMBER
2177	

DATE MAILED: 06/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	10/050,579	LINDEN ET AL.
	Examiner	Art Unit
	Kuen S Lu	2177

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>15 January 2002</u>.
2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-48</u> is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) <u>1-48</u> is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a) ☐ All   b) ☐ Some * c) ☐ None of:
      1. ☐ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____.
      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>4/7-2-02</u>.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Applicant's claim for domestic priority under 35 U.S.C. 119(e) is acknowledged, based on Application 60/343,797, filed on October 24, 2001. The Examiner also noted the Application is a continuation-in-part of Application 09/821,826, filed on March 29, 2001.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on July 2, 2002 was filed after the fling date of the Application 10/050,579 on January 15, 2002. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner. The examiner also noted and considered the references 09/821,826 (filed 3/29/01), 09/104,942 (6/25/98, now U.S. Patent 6,629,079), 09/470,844 (12/23/99, now U.S. Patent 6,691,163), 09/794,952 (2/27/01) and 09/820,207 (3/28/01).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-5, 8 and 11 are rejected are rejected under U.S.C. 102(e) as anticipated by Hosken (U.S. Patent 6,438,579).

As per Claims 1 and 11, Hosken teaches the following:

"a server component which communicates with a plurality of user computers and provides personalized recommendations of items to users thereof" at Fig. 1B, elements 42 and 38s, and col. 2, lines 63-67 and col. 3, lines 5-10 where server system delivers recommendations that are particularly tailored to the personalized interest of a user in a system for individual users; and "a client component which runs on each of the plurality of user computers in association with a web browser and displays the personalized recommendations of items, wherein the client component notifies the server component of web addresses accessed by associated users" at Fig. 1B, elements 38s, and col. 3, lines 5-10, col. 4, lines 33-46 and col. 8, lines 44-47 where users browsing, accessing and navigating for presenting recommendation and referral requests to a referral system within the server system and the users are equipped with plug-ins and applications supporting the presentation of streaming audio and video data as may be returned from the server computer system to the user computer system with final content items in the final results table are preferably sorted and then displayed to the user; and "wherein the server component uses the information reported by an instance of the client component to generate the personalized recommendations for a user by at least (1) identifying a plurality of items accessed by the user during a current browsing session" at col. 4, lines 49-51 where explicit profiling data provided by the user and the implicitly derived data from referral system within the server are used to provide

individualizing recommendations for particular users and "(2) during said browsing session, selecting an item to recommend to the user based at least in part on a degree of relatedness to each of the plurality of items accessed by the user" at col. 4, lines 52-55 where profiling data is collected from individual and at col. 2, lines 43-45 where user directs and navigates among the presented item and user requests for related information.

As per claim 2, Hosken teaches " the server component accesses a table which indicates said degrees of relatedness between items" at col. 2, lines 45-47 where a user weighted data set is developed for reflecting user's relative consideration of the items.

As per claim 3, Hosken teaches "the degrees of relatedness indicated by the table are reflective of an automated analysis of usage trail data of a plurality of users of the client component" at col. 4, lines 51-55 where profiling information collected from individuals is formed a collaboratively developed basis for modifying and expanding on the individualized recommendations that might be otherwise produced by the referral system.

As per claim 4, Hosken teaches "an analysis component which collectively analyzes usage trail data of a plurality of users of the client component in an off-line mode to generate data reflective of the degrees of relatedness between items, wherein the server component uses the data to provide the personalized recommendations" at col. 5, lines 8-11 and 20-25 where content item relationship database is used to store weighting factors which are utilized to establish the relationships identified in the

database between items, and content relationships contribute to referral system for

making individualized recommendations to an individual user.

As per claim 5, Hosken teaches "degrees of relatedness are based upon scores that

take into account browsing history data for a plurality of users" at the Abstract by the

system to save implicit and explicit ratings data for such content items provided by the

users and at col. 11, lines 26-35 where values of confidence level are normalized

between 0.0 and 9.0.

As per claim 8, Hosken teaches "the client component is a browser plug-in" at col. 4,

lines 39-43 by including web plug-ins in the user web browser.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained although the invention is not identically disclosed or described as set
forth in section 102 of this title, if the differences between the subject matter sought to be patented and
the prior art are such that the subject matter as a whole would have been obvious at the time the
invention was made to a person having ordinary skill in the art to which said subject matter pertains.
Patentability shall not be negatived by the manner in which the invention was made.

4. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hosken (U.S.

Patent 6,438,579), as applied to claims 1-5, 8 and 11, and further in view of Tufts (U.S.

Patent 6,691,163).

As per Claim 7, Hosken teaches collecting user's weighted data set which reflects

user's relative interest of items at col. 2, lines 45-47.

Hosken does not specifically teach "degrees of relatedness are based upon a

minimum sensitivity determination".

However, Tufts teaches the relatedness of two web sites or pages A and B is determined using a minimum sensitivity calculation that takes into consideration the number of transitions that occurred between A and B relative to the total number of transitions that involved A and/or B at the Abstract.

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention was made to combine Tufts's reference into Hosken's by using the sensitivity calculation method to calculate the degree of relatedness for Hosken's system concerning user's strength of interest on items because the combined reference would have improved the breadth and reliability of the item recommendations (Tufts: col. 1, lines 65-67).

5. Claims 6 and 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hosken (U.S. Patent 6,438,579), as applied to claims 1-5, 8 and 11, and further in view of Spiegel et al. (U.S. Publication 2002/0194087, hereafter "Spiegel").

As per claim 6, Hosken teaches "wherein degrees of relatedness are based upon a commonality index that takes into account a number of co-occurrences of accesses of a pair of items" at col. 9, lines 39-42 and col. 10, lines 39-43 where data related to external polls, rankings and ratings of different items are collected and users are interviewed, surveyed and questioned initially and on-going basis to obtain relative strength of user's interests on items.

Hosken does not specifically teach that pair of items "within a set of web browsing sessions"

However, Spiegel teaches browsing sessions at Fig. 4, element 412 where various web pages are browsed in browsing sessions.

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention was made to combine Spiegel's reference into Hosken's by users to conduct multiple browsing sessions. The combination of the two references would have been obvious because the two references are devoted to select content items by browsing actions. The web browsing in multiple sessions would have allowed users to review various web pages simultaneously for flexibly obtaining and comparing data displayed on the web pages.

As per Claim 9, Hosken teaches recommending entertainment oriented content items to users in the Abstract.

Hosken does not specifically teach "the item to recommend to the user is a web page, a web site or a web address".

However, Spiegel teaches sending the WWW service allows a server computer system (i.e., Web server or Web site) to send graphical Web pages of information to a remote client computer system at Page 1, [0004].

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention was made to combine Spiegel's reference into Hosken's by including web pages, web addresses or web sites as items for recommending to the users because both references are devoted to content based media and the combined reference would have expanded Hosken system to cover 'other media content items', as described in the Abstract, for recommending to the users.

As per claim 10, Spiegel further teaches "the plurality of items are web pages, web sites or web addresses" at Page 1, [0004] by sending web pages to the remote client user PCs.

6. Claims 12-17, 19-26 and 28-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hosken (U.S. Patent 6,438,579) and in view of Spiegel et al. (U.S. Publication 2002/0194087, hereafter "Spiegel").

As per Claim 12, Hosken teaches "a client component configured to execute on each of a plurality of user computers in conjunction with a web browser" at col. 6, lines 51-60 and 25-26 where browser is utilized to browse item from a master list of items. Hosken further teaches "users" in the system at Fig. 1B, elements 38s.

Hosken does not specifically teach "to identify web addresses", although Hosken teaches "browsed through the web browser" at col. 6, lines 25-26.

However, Spiegel teaches using www to identify URL, specifying URL for web page request, and web browser browsing Web pages at Page 1, [0004]. The teachings suggests the web addresses are browsed.

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention was made to combine Spiegel's reference into Hosken's by including web pages, web addresses or web sites as items for recommending to the users because both references are devoted to content based media and the combined reference would have expanded Hosken system to cover 'other media content items', as described in the Abstract, for recommending to the users.

Hosken teaches "a server component configured to select an item to recommend to a user based at least upon identifications of a plurality of" content items "browsed by the user wherein the identifications of the web addresses are transmitted from an instance of the client component to the server component through a computer network" at Fig. 1B, elements 38s, 26, 40 and 42 where users selecting from source information to input the server, browsing the server and receiving the recommendations.

Spiegel further teaches using www to identify URL, specifying URL for web page request, and web browser browsing Web pages at Page 1, [0004] for identifying web addresses.

As per claim 13, Spiegel further teaches "the plurality of web addresses are browsed during a single browsing session" at Fig. 4, element 420-421, 430, 410 and 412 where various web pages are displayed.

As per claim 14, Spiegel further teaches "the item is a web page, a web site or a web address" at Fig. 4, element 420-421, 430, 410 and 412 where various web pages are displayed.

As per claim 15, Spiegel further teaches "the item is selected based additionally upon at least a degree of relatedness" at col. 9, lines 39-42 and col. 10, lines 39-43 where data related to external polls, rankings and ratings of different items are collected and users are interviewed, surveyed and questioned initially and on-going basis to obtain relative strength of user's interests on items.

Spiegel further teaches "between the item and each of the plurality of web addresses" at Fig. 4, element 412 where various web pages are browsed in browsing sessions.

As per claim 16, Hosken teaches "degree of relatedness is based upon a score that takes into account browsing history data for a plurality of users" at the Abstract by the system to save implicit and explicit ratings data for such content items provided by the users and at col. 11, lines 26-35 where values of confidence level are normalized between 0.0 and 9.0.

As per claim 17, Hosken teaches "wherein degrees of relatedness are based upon a commonality index that takes into account a number of co-occurrences of accesses of a pair of items" at col. 9, lines 39-42 and col. 10, lines 39-43 where data related to external polls, rankings and ratings of different items are collected and users are interviewed, surveyed and questioned initially and on-going basis to obtain relative strength of user's interests on items.

Hosken does not specifically teach that pair of items "within a set of web browsing sessions"

However, Spiegel teaches browsing sessions at Fig. 4, element 412 where various web pages are browsed in browsing sessions.

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention was made to combine Spiegel's reference into Hosken's by users to conduct multiple browsing sessions. The combination of the two references would have been obvious because the two references are devoted to select content items by browsing actions. The web browsing in multiple sessions would have allowed users to review various web pages simultaneously for flexibly obtaining and comparing data displayed on the web pages.

7. As per claim 19, Hosken teaches "wherein the item is a product" at the Abstract where the content items are video or audio products.

As per claim 20, Spiegel further teaches "the item is selected based additionally upon at least a degree of relatedness" and "a plurality of products" at the Abstract where items are video or audio products, and at col. 9, lines 39-42 and col. 10, lines 39-43 where data related to external polls, rankings and ratings of different items are collected and users are interviewed, surveyed and questioned initially and on-going basis to obtain relative strength of user's interests on items.

Spiegel further teaches "between the item and each of the" items "represented upon web pages at the plurality of web addresses" at Fig. 4, element 412 where various web pages are browsed in browsing sessions.

As per claims 21 and 34, Hosken teaches "using a client component which runs on the user's computer in conjunction with a web browser to identify a plurality of items" at col. 6, lines 51-61 where client PC select a media content items from a master list of items.

Hosken does not specifically teach the plurality of items accessed by the user "through a plurality of web sites during a web browsing session".

However, Spiegel teaches a plurality of web sites during a web browsing session by using www to identify URL, specifying URL for http (web page) request, and web browser browsing Web sites at Page 1, [0004] for identifying web sites.

It would have been obvious to one having ordinary skill in the art at the time of the

applicant's invention was made to combine Spiegel's reference into Hosken's by including web pages, web addresses or web sites as items for recommending to the users because both references are devoted to content based media and the combined reference would have expanded Hosken system to cover 'other media content items', as described in the Abstract, for recommending to the users.

Spiegel further teaches "selecting an additional item based at least upon a degree of relatedness between the additional item and each of the plurality of items" at col. 9, lines 39-42 and col. 10, lines 39-43 where data related to external polls, rankings and ratings of different items are collected and users are interviewed, surveyed and questioned initially and on-going basis to obtain relative strength of user's interests on items.

Hosken teaches "recommending the additional item to the user" at col. 6, lines 38-43 where a set of recommendation items to the user.

As per claim 22, Spiegel further teaches "the additional item is a web page, a web site or a web address" at Fig. 4, element 420-421, 430, 410 and 412 where various web pages are displayed.

As per claim 23, Spiegel further teaches "the plurality of items are web pages, web sites or web addresses" at Page 1, [0004] by sending web pages to the remote client user PCs.

As per claim 24, Hosken teaches "the additional item is recommended to the user through the client component" at Fig. 1B, elements 38s and col. 3, lines 5-10, col. 4, lines 33-46 where users browsing, accessing and navigating for presenting

recommendation and referral requests to a referral system within the server system and the users are equipped with plug-ins and applications supporting the presentation of streaming audio and video data as may be returned from the server computer system to the user computer system.

As per claim 25, Hosken teaches "degrees of relatedness are based upon scores that take into account browsing history data for a plurality of users" at the Abstract by the system to save implicit and explicit ratings data for such content items provided by the users and at col. 11, lines 26-35 where values of confidence level are normalized between 0.0 and 9.0.

As per claim 26, Hosken teaches "wherein degrees of relatedness are based upon a commonality index that takes into account a number of co-occurrences of accesses of a pair of items" at col. 9, lines 39-42 and col. 10, lines 39-43 where data related to external polls, rankings and ratings of different items are collected and users are interviewed, surveyed and questioned initially and on-going basis to obtain relative strength of user's interests on items.

Hosken does not specifically teach that pair of items "within a set of web browsing sessions"

However, Spiegel teaches browsing sessions at Fig. 4, element 412 where various web pages are browsed in browsing sessions.

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention was made to combine Spiegel's reference into Hosken's by users to conduct multiple browsing sessions. The combination of the two references would

have been obvious because the two references are devoted to select content items by browsing actions. The web browsing in multiple sessions would have allowed users to review various web pages simultaneously for flexibly obtaining and comparing data displayed on the web pages.

8. As per claim 28, Hosken teaches "wherein the additional item is selected by a server component that receives an identification of the plurality of items from the client component" at col. 6, lines 51-61 where user select an item from a master list and submits to the server.

As per claim 29, Hosken teaches "wherein the item is a product" at the Abstract where the content items are video or audio products.

As per claim 30, Spiegel further teaches "receiving from the client component identifications of a plurality of web addresses browsed by the user during the web browsing session" at Fig. 4, element 412 by showing various web pages and by using www to identify URL, specifying URL for web page request, and web browser browsing Web pages at Page 1, [0004] for identifying web addresses; and

"using an association of web addresses with items to identify the plurality of items based upon the plurality of web addresses" at Page 1, [0005] when the requested HTML document is received by the client computer and the browser displays the web page. The HTML document may contain URLs of other web pages available on the server or other systems.

As per claim 31, Hosken teaches "the association of web addresses with items is based at least upon content-based analysis" at col. 11, line 13-19 where user behaviors

are analyzed to identify media content attribute and media content item interests implicitly expressed by the user through browsing activities. Preferably, the result of this analysis is again a set of binary relations between characterizing attributes of media content items and a relative weighting of the relations representing the strength of the interests.

9. As per claims 32 and 36, Hosken teaches "the association of web addresses with items is based at least upon structured-based analysis" at col. 11, line 13-19 where user behaviors are analyzed to identify media content attribute and media content item interests implicitly expressed by the user through browsing activities. Preferably, the result of this analysis is again a set of binary relations between characterizing attributes of media content items and a relative weighting of the relations representing the strength of the interests.

As per claims 33 and 37, Hosken teaches "the association of web addresses with items is based at least upon user identification of items on web pages" at col. 11, line 13-19 where user behaviors are analyzed to identify media content attribute and media content item interests implicitly expressed by the user through browsing activities. Preferably, the result of this analysis is again a set of binary relations between characterizing attributes of media content items and a relative weighting of the relations representing the strength of the interests.

As per claim 35, Hosken teaches "the plurality of items is identified by at least retrieving" at col. 6, lines 39-43 where a set of recommended items is presented to and received by the user.

Spiegel further teaches "analyzing the plurality of web pages" at Fig. 4, element 412 where various web pages are displayed for user to analyze.

As per claim 38, Hosken teaches "the plurality of items is identified by at least receiving information from users" at col. 4, lines 56-64 by users to select items from a master list on a content page.

Hosken does not specifically teaching browsing web pages or the content page being a web page.

However, Spiegel teaches "browsing web pages regarding representations of items on the web pages" at Fig. 4, element 412 and Page 4, [0030] by browsing web pages to request information.

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention was made to combine Spiegel's reference into Hosken's by including web pages, web addresses or web sites as items for recommending to the users because both references are devoted to content based media and the combined reference would have expanded Hosken system to browse web pages in a multiple session for requesting items needed.

As per claim 39, Hosken teaches "wherein the item is a product" at the Abstract where the content items are video or audio products.

As per claim 40, Spiegel further teaches "each of the plurality of web pages is identified through its web address" by using www to identify URL, specifying URL for web page request, and web browser browsing Web pages at Page 1, [0004]. The teachings suggests the web addresses are browsed to identify web pages.

10. Claims 41-44 and 46-48 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Wynn et al. (U.S. Patent 6,667,751, hereafter "Wynn") in view of Hosken (U.S.

Patent 6,438,579), and further in view of Spiegel et al. (U.S. Publication 2002/0194087,

hereafter "Spiegel").

As per claim 41, Wynn teaches the following:

"For each of a plurality of web browsing sessions, capturing a browsing history of web

pages" at col. 6, line 46 and col. 11, lines9-12 where browsing session, browser history

and web pages are recorded, reviewed and refreshed; and

"for each browsing history, identifying a history of" contents "represented on the web

pages in the browsing history by at least retrieving the web pages in the browsing

history and analyzing the retrieved web pages" at Fig. 4 and col. 6, lines 24-45 where

contents of web pages are displayed, browser history and browsing sessions are

displayed and reviewed.

Wynn does not specifically teach identifying history of items, although Wynn teaches

identifying the contents on the web pages.

However, Hosken teaches sending a recommendation set of list of items to the users

to identify at col. 6, lines 19-25. .

It would have been obvious to one having ordinary skill in the art at the time of the

applicant's invention was made to combine Hosken's reference into Wynn's by including

the items selection from the content page as part of the browser history, browsing

sessions and page recording and review activities because both reference s are

devoted to the web page review and its content or item selection. The combination of

reference would have allowed users to visually retrace previously visited web sites and documents and further allowed the users a more direct selection of a site, an address, contents or items to revisit.

Hosken further teaches "determining degrees of relatedness between items based at least in part upon the histories of items" at col. 4, lines 52-55 where profiling data is collected from individual and at col. 2, lines 43-45 where user directs and navigates among the presented item and user requests for related information.

As per claim 42, Wynn teaches "a client component configured to execute on each of a plurality of user computers in conjunction with a web browser to identify web addresses browsed through the web browser, wherein each browsing history is captured using an instance of the client component" at Figs. 5 and 8, and col. 7, lines 5-25 and col. 4, lines 48-49 where client browser systems are described and web page with wed addresses captured previously are displayed.

11. As per claim 43, Hosken teaches "wherein the item is a product" at the Abstract where the content items are video or audio products.

As per claim 44, Hosken teaches "the degrees of relatedness are determined using a commonality index" at col. 9, lines 39-42 and col. 10, lines 39-43 where data related to external polls, rankings and ratings of different items are collected and users are interviewed, surveyed and questioned initially and on-going basis to obtain relative strength of user's interests on items.

As per claim 46, Hosken further teaches "the association of web addresses with items is based at least upon content-based analysis" at col. 11, line 13-19 where user

behaviors are analyzed to identify media content attribute and media content item interests implicitly expressed by the user through browsing activities. Preferably, the result of this analysis is again a set of binary relations between characterizing attributes of media content items and a relative weighting of the relations representing the strength of the interests.

As per claim 47, Hosken further teaches "the association of web addresses with items is based at least upon structured-based analysis" at col. 11, line 13-19 where user behaviors are analyzed to identify media content attribute and media content item interests implicitly expressed by the user through browsing activities. Preferably, the result of this analysis is again a set of binary relations between characterizing attributes of media content items and a relative weighting of the relations representing the strength of the interests.

As per claim 48, Hosken further teaches "the association of web addresses with items is based at least upon user identification of items on web pages" at col. 11, line 13-19 where user behaviors are analyzed to identify media content attribute and media content item interests implicitly expressed by the user through browsing activities. Preferably, the result of this analysis is again a set of binary relations between characterizing attributes of media content items and a relative weighting of the relations representing the strength of the interests.

12. Claims 18 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hosken (U.S. Patent 6,438,579) in view of Spiegel et al. (U.S. Publication

2002/0194087, hereafter "Spiegel"), as applied to claims 12-17, 19-26 and 28-40, and further in view of Tufts (U.S. Patent 6,691,163).

As per Claims 18 and 27, the Spiegel-Hosken combined reference does not teach "degrees of relatedness are based upon a minimum sensitivity determination", although Hosken teaches collecting user's weighted data set which reflects user's relative interest of items at col. 2, lines 45-47.

However, Tufts teaches the relatedness of two web sites or pages A and B is determined using a minimum sensitivity calculation that takes into consideration the number of transitions that occurred between A and B relative to the total number of transitions that involved A and/or B at the Abstract.

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention was made to combine Tufts's reference into Spiegel and Hosken's by using the sensitivity calculation method to calculate the degree of relatedness for Wynn's system concerning user's strength of interest on items because the combined reference would have improved the breadth and reliability of the item recommendations.
13. Claim 45 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wynn et al. (U.S. Patent 6,667,751, hereafter "Wynn") in view of Hosken (U.S. Patent 6,438,579), as applied to claims 41-44 and 46-48 above, and further in view of Tufts (U.S. Patent 6,691,163).

As per Claim 45, Hosken teaches collecting user's weighted data set which reflects user's relative interest of items at col. 2, lines 45-47.

Hosken does not specifically teach "degrees of relatedness are based upon a minimum sensitivity determination".

However, Tufts teaches the relatedness of two web sites or pages A and B is determined using a minimum sensitivity calculation that takes into consideration the number of transitions that occurred between A and B relative to the total number of transitions that involved A and/or B at the Abstract.

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention was made to combine Tufts's reference into Hosken and Wynn's by using the sensitivity calculation method to calculate the degree of relatedness for Wynn's system concerning user's strength of interest on items because the combined reference would have improved the breadth and reliability of the item recommendations.

Conclusions

14. The prior art made of record

    A. U.S. Patent   6,438,579

    B. U.S. Patent   6,691,163

    C. U.S. Publication 2002/0194087

    D. U.S. Patent   6,667,751

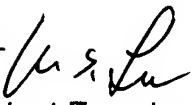The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

    E. U.S. Patent   6,466,970

    F. U.S. Publication 2001/0034658

    G. U.S. Publication 2003/0039341

      H. U.S. Publication   2002/0072955

      I. U.S. Patent   6,665,837

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kuen S Lu whose telephone number is 703-305-4894. The examiner can normally be reached on 8 AM to 5 PM, Monday through Friday. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on 703-305-9790. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

KL

Patent Examiner

May 26, 2004

SRIRAMA CHANDRAMOULI
PRIMARY EXAMINER